

# Growth Opportunities and IPO Initial Performance. Is There an Interacting Effect of Public Issue?

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**Abstract** - The declining rate on initial return of Malaysian IPOs over the past years have alarmed investors to astutely choose IPO firms for a better security of their investment's income. In an attempt to offer an aid for the danger on the loss of capital that the investors might suffer, this study is initiated to search for explanations on the variation of IPO returns particularly in the initial aftermarket. This study proposes "growth opportunities in an IPO firm" and "allocation of IPOs through public issue approach" as its main explanatory factors which the former acts as main explanatory variable while the latter serves as interacting variable. This study defines "growth opportunities of firms" as the possibility of an IPO firm to enlarge its market share over the long period. The "growth opportunities of firms" are measured by the total allocation amount received from the issuance of IPOs to activities (e.g., assets acquisition and business expansion) which possibly support growth of a firm in a future. To an extent, a higher amount of proceeds channeled to "growth activities" are expected to increase growth opportunities of firms such that will encourage higher participation on the shares of the issuing firms as well as higher returns of the shares. Nonetheless, "growth opportunities of firms" can be accurately gauged only if the amount of cash from the sale of IPOs are owned by the issuing firms. That is, the public issue approach that an IPO firm adopts when issue for its shares to public should finalize the final proceeds eligible to be allocated to any intended activities of the firm. Using a total 447 IPOs listed in Main Market and ACE Market of Bursa Malaysia from 2000 to 2018, tested using hierarchical regression models, this study found that the proceeds allocated to growth activities significantly positively influence initial return. However, this study is not able to produce a significant interaction effect of public issue on the main relationship tested earlier.

**Keywords** - Growth Opportunities, Initial Aftermarket Return, Initial Public Offerings (IPOs,) Public Issue

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## I. Introduction

The performance of initial public offering (IPO) especially in initial aftermarket has received tremendous attention from past researchers. The return earned by investors on the day of listing are often abnormal, in which the investors are able to secure higher return from their investment. Yong (2019) state that investors who are success to buy or subscribe the IPO felt like they have hitting the jackpot due to the higher return earned. Recent investors, however, are less likely to earn initial return as high as those investors who enter the market in

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90s to early 20s. This is because this study observe that the percentage of initial return earned by investors have shown a declining pattern (Figure 1).

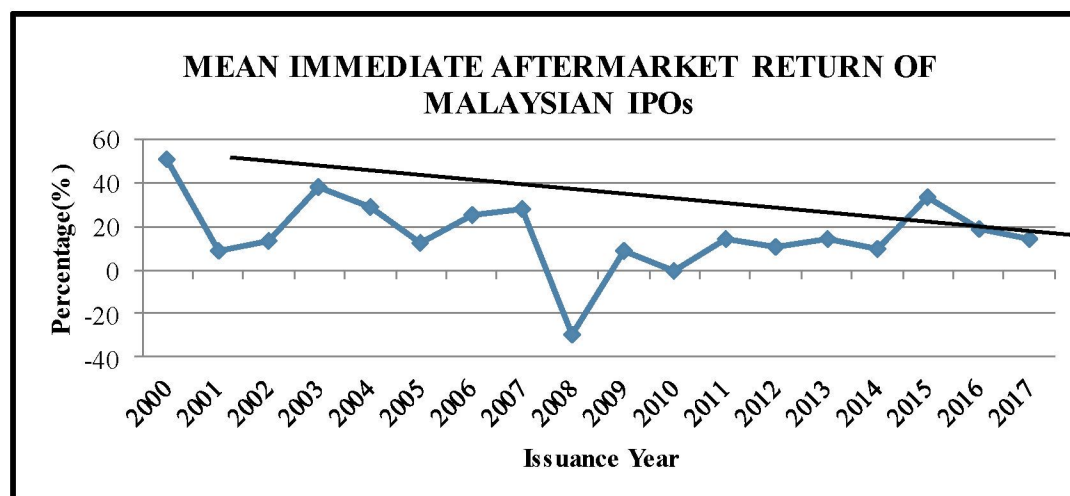


Figure 1 – Mean Initial Return of Malaysian IPOs

The declining patterns on the positive initial return have alarmed investors to astutely choose an IPO firm to secure a good return of investment. Previously, past studies have exposed numerous determinants which explain the initial performance of IPOs such as demand of IPOs (Abdul-Rahim & Che-Embi, 2013; Abdul-Rahim, Che-Yahya, & Mohd-Rashid, 2015; Yong & Isa, 2003; Yong, Yatim, & Sopian, 2011), offer size (Abdul-Rahim & Che-Embi, 2013; Ibbotson & Ritter, 1995; Song, Tan, & Yi, 2014), market condition (Aissia, 2014; Che-Yahya, Abdul-Rahim, & Mohd-Rashid, 2015; Deng & Zhou, 2016; Sundarasan, Goel, & Zulaini, 2017), underwriter reputation (Beatty & Ritter, 1986; Carter & Manaster, 1990; Rath, 2008; Zarafat, 2013), firm size (Mousa, 2009; Rath, 2008), and growth opportunities (Abdul-Rahim & Che-Embi, 2013; Abdul-Rahman & Che-Yahya, 2019; Amor & Kooli, 2017). However, among the list of significant determinants to initial aftermarket, the study on growth opportunities as the main explanatory factor is still limited. This study foresees that the amount of proceeds allocated to activities which increase the growth opportunities of firms should serve as a tool which helps the investors to predict future performance of a firm besides assisting the investors in choosing a good firm to invest in.

The firms are motivated to switch its status from private listed firm to public listed firm primarily due to financial needs such as liquidity purposes, repayment of debts, research and development and capital expenditure. Once the firms decided to change its status to public listed firms, the firms need to disclose the information on how the firms are going to channel the proceeds received from the issuance of IPOs. The firms could channeled the proceeds received to activities such as working capital, R&D, capital expenditures, sales, marketing and general purposes (Amor & Kooli, 2017). The investors are able to find this information in the “intended use of proceeds” section in firm’s prospectuses. In order to help the investors to secure higher return, this study suggest that investors to look into the information on the use of proceeds especially the amount allocated to growth and investment activities as this information transmit an information about firm’s future performance in the aftermarket.

Abdul-Rahim and Che-Embi (2013) and Tajuddin et al. (2016) define growth opportunities as the total proceeds received by IPO issuers to be allocated to activities which can help the firms to sustain longer in the market. Subrahmanyam and Titman (1999) defines growth financing as the use of proceeds for the acquisition of fixed assets. The study suggests that they could expand its market share by acquiring new equipment as it is more likely to lift up production of a firm. In addition, Andriansyah and Messinis (2016) propose that the intention on the use of proceeds to fixed assets will lead to positive post-IPO performance. In the context of this study, acknowledging the definition of growth opportunities provided by previous studies, this study defines growth opportunities as the allocation of proceeds to activities (specifically growth and investment activities) as this two activities lead to higher growth opportunities and therefore, higher demand from investors and higher initial return.

This study further proposes that the relationship between growth opportunities of firms and initial aftermarket performance of IPOs can be strengthen by allocation type of public issue. This is due to the proceeds received from the issuance of public issue will goes back to the IPO issuer to be allocated to the mentioned activities. Bildik and Yilmaz (2006) states that firms can further growth when the firms issues most

of its shares through public issue. The issuance of newly issued shares through public issue are able to attract investors to demand for the shares because the investors perceives that the IPO issuer are able to fully utilize the proceeds received to activities according to its objectives, specifically to activities which can help the firms to sustain longer in the market. Empirically, Scott and Xu (2004) reports that firms which issues its shares mostly through offer for sales recorded lower demand from investors thus lead to lower aftermarket return. The investors perceives that the investors only have small amount of money for their future growth as the proceeds from the issuance of offer for sales will not goes directly to the firms but to the pocket of investors (existing shareholders). Indirectly, firms which issues most of its shares through public issue will recorded higher demand from investors and higher initial return.

Thus, this study is examined to provide empirical evidence on the influence of growth opportunities on initial aftermarket performance as well as the interaction effect of public issue which strengthen the main relationship between growth opportunities of firms and initial aftermarket performance of IPOs. The remaining sections of this paper continue with Section 2; Literature review. Section 3 describes data of this study and methodology. Section 4 discusses the empirical results while Section 5 concludes the findings.

## **II. Literature Review**

As specified by Securities Commision, a firm which decided to go public for the first time is required to disclose the information on the use of proceeds. Previous studies have classified the activities in which the firms can channel its proceeds to several categories which include GROWTH, SHARES, INVEST, DEBT, MARKETING and GENERAL activities. Abdul-Rahim and Che-Embi (2013) and Andriansyah and Messinis (2016) classified working capital, research and development and capital expenditure as GROWTH activities, secondary shares as SHARES activity, future acquisitions, R&D and capital expenditures as INVEST activities, repayment of debt as DEBT activities (Andriansyah & Messinis, 2016; Autore, Bray, & Peterson, 2009), sales and advertisement activities as MARKETING activities (Amor & Kooli, 2017; Leone, Rock, & Vasvari, 2007) and general corporate purposes as GENERAL activities (Amor & Kooli, 2017).

The studies on growth opportunities have been proved empirically by Amor and Kooli (2017) and Abdul-Rahim and Che-Embi (2013). Amor and Kooli (2017) investigate the intended use of proceeds and post IPO performance proves that firms which allocates higher amount of proceeds to growth activities influence the performance of IPOs to be better over the long-term. Meanwhile, Abdul-Rahim and Che-Embi (2013) examines the initial return of shariah and non-shariah IPO founds that growth opportunities have no significant effect in explaining initial aftermarket performance of IPO. The study however, stated that growth opportunities gives signal to investors on the future performance of firms. Following the proposition forwarded in Abdul-Rahim and Che-Embi (2013), this study posits that the information on the “use of proceeds” in firm’s prospectuses could be used as signalling tool to transmit the information to investors on the firm’s future performances. The investors could interpret the information that the firms are performing better in the aftermarket if the firms allocate most of its proceeds to growth and investment activities (working capital, capital expenditure, acquisition of assets, business development, investment in shares and research and development). This could interpret as good signal by the investors.

The growth opportunity of a firm is also depending on the allocation type of IPOs. There are three common allocation types which are often used by IPO issuer which are public issue, offer for sale and hybrid of public issue and offer for sale (Yong & Isa, 2003). Public issue is where an IPO issuer offered newly issued shares to potential investors and the proceeds will goes back to the firms and increases the firms paid-up capital, while offer for sale is where existing shareholder offered its shares to public and the proceeds will goes directly to the pocket of shareholder and does not increase the paid-up capital of firms. Based on the observation of this study on the firms’ prospectuses, the common allocation types in Malaysia is hybrid issue that is the combination of public issue and offer for sales. From the issuance of hybrid issue, only proceeds received from the issuance of public issue goes back to the firms. When the firms offer most of its shares through public issue, the firms will have more proceeds to be allocated to activities which increase the growth opportunities of firms. The higher the growth opportunities of firms, the higher the demand from investors as the investors believe that the firms have better plan to further growth in the aftermarket. This situation later leads to higher initial aftermarket return.

In light of ensuring the firms to have enough money to support for its businesses once going public, Bursa Malaysia have set a minimum amount of newly issued shares to be issued through public issue type. The firms need to offer at least 25 percent of newly issued shares to public investors, regardless of market (Main Market and ACE Market). This is a good implementation by Bursa Malaysia, as the firms will have enough money to support for their future businesses.

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### III. Data and Methodology

The population of this study is 584 IPOs listed on Main Market, ACE Market and LEAP Market of Bursa Malaysia from January 2000 to December 2018. Out of 584 IPOs listed, a total of 137 IPOs have been excluded, left only 447 IPOs as a final sample. A total of 137 IPOs have been excluded following the filtering process, in which this study excludes IPOs listed in LEAP Market, all rare types of IPOs (e.g., restricted offer for sale, restricted public issue, warrants, tender offer), financial, insurance and REITs firms, IPO with missing value and outlier. The reason of not including the IPOs listed in LEAP market is due to the access of the shares whereby the shares can only be subscribed by sophisticated investors. Due to its small number, including the rare types of IPO is less likely to produce meaningful result. Meanwhile, the exclusion of financial, insurance and REITs firms is due to the differences in the format presentation of its financial statement (Mohd-Rashid, Abdul-Rahim, & Che-Yahya, 2018; Yatim, 2008). The data used in this study is sourced from firm's prospectuses, website of Bursa Malaysia, Thomson Reuters Eikon database and Bloomberg.

#### 3.1 Definition and Measurement

##### 3.1.1 Dependent Variable

The initial aftermarket returns ( $R_{IA}$ ) is the dependent variable of this study. The initial aftermarket return is measured as the percentage change in price on the first trading day (Anderloni & Tanda, 2017; Mohd-Rashid, Abdul-Rahim, & Yong, 2014). The measurement of  $R_{IA}$  is as per Equation (1):

$$R_{IA} = \frac{P_{close_i} - P_{offer_i}}{P_{offer_i}} \times 100$$

Where,  $P_{close}$  is the closing price on the first trading day of  $i$ th firms and  $P_{offer}$  is the offer price of  $i$ th firms.

##### 3.1.2 Main Independent Variable

Growth opportunity of a firm (GOPP) that is defined as the allocation of proceeds received from the issuance of public issue to activities such as R&D, investment and capital expenditure is the main independent variable of this study. The GOPP of firms is measured as the total allocation of proceeds to activities (i.e; growth and investment activities) against total proceeds from the issuance of IPOs through public issue (Abdul-Rahim & Che-Embi, 2013; Tajuddin, Abdullah, & Taufil-Mohd, 2016). The measurement (2) is as follows:

$$GOPP = \frac{GROWTH}{PROCEEDS} \times 100$$

Where, GROWTH is proceeds for growth activities (investment, R&D, capital expenditure, working capital, investment in fixed asset) and PROCEEDS is the total proceeds from public issue and offer for sales of  $i$ th firms.

##### 3.1.3 Interacting Variable

Public issue is where the firms allocates newly issue shares to potential investors and the proceeds will goes back to firms and increase the firms paid-up capital (Yong & Isa, 2003). Public issue can be measured by dividing total number of shares issues through public issue to total number of shares issued. The measurement is as equation (3):

$$PI = \frac{P_{issue_i}}{P_{issue_i} + offsales_i}$$

Where,  $P_{issue}$  is the number of shares offered through public issue and  $offsales$  is the number of shares offered through offer for sales

### 3.1.4 Other Independent Variables

Table 1 summarized the list of other predictor variables used in this study as well as the expected sign and supporting literatures on the selection and predictions of signs of each variable.

Table 1: Summary of other Independent Variables and Expected Sign

No.	Variables	Measurement	Exp. Sign	Past Studies
1.	Demand of IPOs (DEMAND)	Subscription ratio	+ve	Tajuddin, Abdullah, and Taufil-Mohd (2016), Wan-Hussin (2005)
2.	Offering Size (OFFSIZE)	Ln(no of total shares issued $\times$ offer price)	-ve	Abdul-Rahim, Che-Yahya, and Mohd-Rashid (2015), Song, Tan, and Yi (2014)
3.	Underwriter Reputation (UNDRANK)	The underwriting amount of shares for the $i$ th investment bank in the listing year against the total underwriting amount in $i$ th listing year	-ve	Che-Yahya, Abdul-Rahim, and Yong (2014), Sundarasan, Goel, and Zulaini (2017)
4.	Market Condition (MKTRETURN)	Percentage change of FTSE Bursa Malaysia KLCI index on the listing day over FTSE Bursa Malaysia KLCI index a year before listing.	+ve	Mohamad, Nassir, and Ariff (1994), Chong and Pua (2009)

### 3.1.5 Operationalization of the Hierarchical Regression Model

The high issuance of public issue (PI) is expected to interact (strengthen or weaken) the main relationship between growth opportunities of firms (GOPP) and initial aftermarket performance ( $R_{IA}$ ). Following Baron and Kenny (1986) and Che-Yahya, Mohd-Rashid, and Abdul-Rahim (2017), this study uses two-step regression models in examining the interacting effect of public issue. The illustration and explanation is as follows:

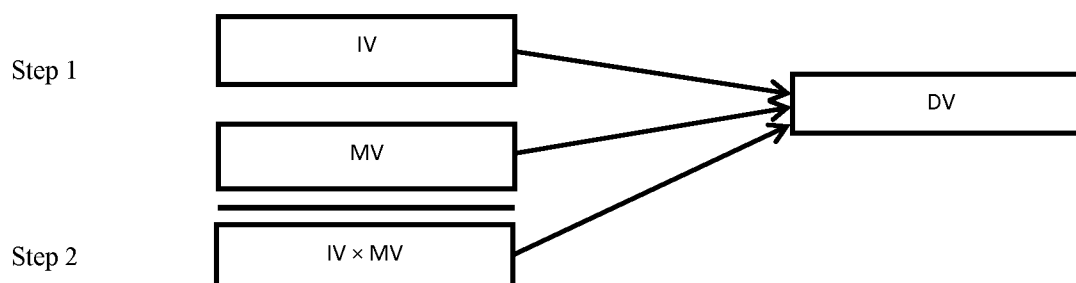


Figure 2 Two-Steps Regression



Step 1: The upper section is where the main independent variable (IV) that is growth opportunities of firms and the interacting variable (MV) that is public issue are included into regression model. In which, both IV and MV are treated as predictor variables of the dependent variable ( $R_{IA}$ ). Although the interacting variable is included in the model, the main predictor variable (GOPP) will still be the focus of interest for this study, up to this step. According to Baron and Kenny (1986), Che-Yahya et al. (2017) and Bennett (2000), the IV (GOPP) should not necessarily produce a significant influence on the dependent variable (DV) ( $R_{IA}$ ) in order to carry out to Step 2. Equation (4) is used to analyze the influence of GOPP and PI on IPO performance.

$$R_{IAi} = \alpha + \beta_1 GOPP_i + \beta_2 PI_i + \beta_3 DEMAND_i + \beta_4 OFFSIZE_i + \beta_5 UNDRANK_i + \beta_6 COSIZE_i + \beta_7 MKTRETURN_{IAi} + \epsilon_i$$

Where,

$R_{IA}$	= Performance of IPO in immediate aftermarket
$\alpha$	= The constant term
$\beta$	= The estimate coefficient or loading of the respective factor
$GOPP_i$	= Growth opportunities
$PI_i$	= Public Issue
$DEMAND_i$	= Subscription ratio
$OFFSIZE_i$	= Offering size
$UNDRANK_i$	= Underwriter reputation
$COSIZE_i$	= Firm size
$MKTRETURN_i$	= Market Condition
$GOPP \times PI$	= Interaction effect of Public issue on the relationship between growth opportunities and performance of IPOs

Step 2: The lower section of Figure 2 is where the interaction effect of public issue is tested. According to Bennett (2000), including the MV in its own step will help to identify the main effect of IV and MV. This step is mainly to answer the question of whether there is an interaction effect of public issue on the direct relationship between GOPP and  $R_{IA}$ . The interaction effect of public issue on the main relationships is as per specified in Equation (5).

$$R_{IAi} = \alpha + \beta_1 GOPP_i + \beta_2 PI_i + \beta_3 (GOPP \times PI)_i + \beta_4 DEMAND_i + \beta_5 OFFSIZE_i + \beta_6 UNDRANK_i + \beta_7 COSIZE_i + \beta_8 MKTRETURN_{IAi} + \epsilon_i$$

Where,

$R_{IA}$	= Performance of IPO in long-term aftermarket
$\alpha$	= The constant term
$\beta$	= The estimate coefficient or loading of the respective factor
$GOPP_i$	= Growth opportunities
$PI_i$	= Public Issue
$DEMAND_i$	= Subscription ratio
$OFFSIZE_i$	= Offering size
$UNDRANK_i$	= Underwriter reputation
$COSIZE_i$	= Firm size
$MKTRETURN_i$	= Market Condition
$GOPP \times PI$	= Interaction effect of Public issue on the relationship between growth opportunities and performance of IPOs

In summary, the presence of interaction effect of public issue is supported only when the p-value of (IV  $\times$  MV) is found significant according to Baron & Kenny (1986) and Che-Yahya et al. (2017). According to Warner (2008), the pattern of interaction effect is explained by the change in t-statistic as well as coefficient sign of the main IV.

## IV. Empirical Results and Discussion

### 4.1 Preliminary Results

The descriptive statistics of the variables in the final sample of 447 IPOs listed in Bursa Malaysia from January 2000 to December 2018 are presented in Table 2. On average, investors with short term objectives earn a return of 21.42 percent. The highest initial aftermarket return that investors earned is 409.38 and there are some investors that received lowest return of -70.70 percent. The maximum value of initial aftermarket return proves that the investors could earn a return for more than 400 percent despite the declining value of initial aftermarket return over the years. The key to earn higher initial aftermarket return is by choosing a good firm before making a decision to leave their money in IPO firms. The main predicting variable that is growth opportunity of a firm (GOPP) shows an average return of 66.49 percent ranging from 0 percent to 100 percent. The average value of GOPP implies that firms which go-public within the studied period allocates more than 66 percent of proceeds received from the issuance of public issue to activities (i.e; growth and investment activities) which increase the growth opportunities of firms. The remaining 33.51 percent of proceeds probably used to pay off its debt or other obligations as per the firm's objectives.

Table 2: Descriptive Statistic of Sample IPOs (2000-2018)

Variables	Mean	Median	Min.	Max.	Std. Dev
Initial return (%)	21.42	13.16	-70.70	409.38	46.04
Growth opportunities (%)	66.49	75.04	0.00	100.00	26.29
Public Issue (%)	58.72	59.50	0.00	100.00	32.94
Interaction (%)	4087.07	3533.80	0.00	10000	2770.59
Subscription ratio (times)	27.56	14.10	-0.89	377.96	41.81
Offer size (RM'000)	187,000	24,750	2,400	12,500,000	1,020,000
Underwriter reputation (%)	8.25	3.20	0.00	53.00	11.10
Market condition <sub>ia</sub> (%)	11.33	9.96	-41.24	96.96	17.69

Table 3 reports the correlations among variables. As presented in Table 3, the correlation among variables used in this study does not exceed the cut-off point of 0.90 (Asteriou & Hall, 2015). The exceptional is between public issue and interaction effect. The correlation value of 0.8342 indicates that these variables are highly correlated. To prove that there are no multicollinearity issue among variables, this study further test using variance inflation factor (VIF). The highest VIF value of 6.3136 in  $R_{ia(interaction)}$  shows that the value does not exceed the cut-off point that is 10 (Groß, 2003) indicating that there is no multicollinearity issue among variables used in both model.

Table 3: Correlation Matrix among Variables

Variables	R <sub>IA</sub>	GOPP	PI	INTERACTION	DEMAND	OFFSIZE	UNDRANK	MKTRETURN <sub>ia</sub>
R <sub>IA</sub>	1	0.0582	0.1630	0.1252	0.3717	-0.0630	0.0224	0.1791
GOPP		1	0.1384	0.5285	0.0517	-0.0479	-0.1252	-0.0425
PI			1	0.8342	0.0799	-0.0881	-0.0676	0.0048
INTERACTION				1	0.0651	-0.0608	-0.0683	-0.0202
DEMAND					1	-0.0916	-0.0882	0.1923
OFFSIZE						1	0.1948	0.0558
UNDRANK							1	0.0995
MKTRETURN <sub>ia</sub>								1

## 4.2 Main Empirical Results

This study focuses on the influence of growth opportunity of a firm (GOPP) on initial aftermarket performance ( $R_{IA}$ ). The regression results of two Models (Model A and Model B) are presented in Table 4. Model A shows the result of initial aftermarket return without the existence of interaction effect of public issue (PI) and Model B shows the result of interaction effect of PI. Before proceeds to the main findings, this study first conducts several diagnostic tests which include Jarque-Bera to test for normality, White-test to test for heterocedasticity issue, Durbin-watson for autocorrelation and Ramsey RESET test for model specification. The purpose of conducting the diagnostic test is to ensure the cleanliness of data as well as producing a reliable result.

The reported result on Model A and B are after addressing the heterocedasticity issue using Huber-white test. As presented in Table 4, Model A ( $R_{IA}$ ) and Model B ( $R_{IA(interaction)}$ ) produced an adjusted  $R^2$  of 16.67 percent and 16.90 percent, respectively. The adjusted  $R^2$  reported in both models indicates that only 16.67 percent and 16.90 percent of the variation in  $R_{IA}$  and  $R_{IA(interaction)}$  are explained by the variables used in this study. The F-statistic of 16.08 and 13.96 for Model A and B are both significant at 1 percent level which indicates that the models are fit. Both Models are also free from the issues of autocorrelation and multicollinearity.

Table 4: OLS Regression results

	MODEL A: R <sub>IA</sub>			Model B: R <sub>IA(interaction)</sub>	
Variables	Exp. Sign	Coefficient	T-Stats	Coefficient	T-Stats
Main Independent Variable					
GOPP	+ve	0.0531	0.9228	0.1513	1.6861*
PI		0.1635	2.4413**	0.3081	2.9750***
Other Independent Variables					
DEMAND	+ve	0.3536	6.4617***	0.3532	6.4968***
OFFSIZE	-ve	-3.4652	-3.0048***	-3.2200	-2.7097***
UNDRANK	+ve	0.3236	1.9689**	0.3371	2.0227***
MKTRETURN	+ve	0.2972	3.0166***	0.2938	3.0079***
Interacting Variable					
GOPP*PI				-0.0022	-1.3596
R <sup>2</sup>		0.1799		0.1820	
Adjusted R <sup>2</sup>		0.1687		0.1690	
F-statistic		16.0817		13.9563	
p-value (F-stats)		0.0000		0.0000	
Durbin Watson		1.6060		1.6034	

Note: Sample size = 447. \*\*\*, \*\* and \* indicate significant at 1%, 5% and 10% level, respectively.

Based on the regression result of Model A in Table 4, it shows that GOPP has no significant influence in determining the initial aftermarket performance of IPOs (t-statistic = 1.1721). The result of first step regression (Model A) indicate that the hypothesis that GOPP influence  $R_{IA}$  positively is unable to be supported. This could be due to the investor's perception that are more concern on the information of types of offering in the earlier stage of subscriptions. The investors translate the information on the types of offering as a crucial signal, as the investors knows how much proceeds will goes back to the firms based on the types of issuance (public issue or offer for sales). Although GOPP is insignificant in determining the  $R_{IA}$  in Model A, it should not be an issue as the main independent variable is not necessarily to produce significant influence on the



dependent variable in the first step of regression model, in order to proceed to the next step that is testing for the interaction effect (Model B) (Baron & Kenny, 1986; Che-Yahya, Mohd-Rashid, & Abdul-Rahim, 2017).

Further, this study is continuing with the reporting of second step regression Model (Model B) results. As shown in Table 4, the positive sign of GOPP as the main predictor variable remain the same to the one reported in Model A. Specifically, the t-statistic of GOPP switches from 0.9228 in Model A to 1.6861 in Model B. As proposed earlier, PI should interact the direct relationship between GOPP and  $R_{IA}$ . However, the t-statistic of interaction effect is -1.3596 which is negatively insignificant. The negative coefficient shows a negative relationship between interaction effect of PI on the direct relationship of GOPP and  $R_{IA}$ . The result indicates that the hypothesis on the interaction effect of PI on the direct relationship is hardly supported. Even though the interaction effect is insignificant and the hypothesis that public issue interact the direct relationship between growth opportunity of a firm and initial aftermarket performance of IPO could not be supported, this study find an interesting result. After the inclusion of interaction effect in the regression model, this study observes that it has strengthened the individual relationship between GOPP and  $R_{IA}$  as well as PI and  $R_{IA}$ . The significant level of GOPP has switch from insignificant to significant at 10 percent level, while the individual effect of PI has also shows an increment from 5 percent level to 1 percent level.

Further, the result proves that the IPO firms produced higher  $R_{IA}$  when the firms distribute higher percentage of proceeds to growth and investment activities. Besides, the allocation of proceeds to activities which increases the GOPP also attracts a large number of investors to participate in the trading of IPO shares. This is because, being an investors, they knows that firms which uses most of its proceeds for growth and investment activities have a clear direction to further grow in the aftermarket. The finding of this study is similar to that found in Amor and Kooli (2017) which the performance of IPOs in the aftermarket is favourable when IPO firms reported investment as its main intention of going-public. The significant positive relationship between GOPP and  $R_{IA}$  also seems to be consistent to the theory employed in this study that is signalling theory. The finding of this study support the proposition forwarded in signalling theory, whereby the information on the proceeds allocation to growth and investment activities convey a good signal to potential investors on a potential good initial aftermarket performance of IPO firms. The signal has been translated by investors as a good signal thus attracts the investors to actively demand for the shares. Higher demand from investors boost up the price thus lead to higher aftermarket return proves that GOPP have transmitted the information effectively.

The reported result on the insignificant interaction effect could also be due to the way investors interpret the information provided by IPO issuers. Normally, potential investors who opt to leave their money in IPO firms are inexperienced investors with little knowledge of investment. At the earlier stage of listing, the investors interpret the information provided separately. As for this study, it shows that after the inclusion of PI as interaction effect, it increases the value of GOPP. Not only that, the value of PI is also increase. Meaning that, the investors treasure both information of PI and GOPP. From the inexperience investor's point of view, firms which offered higher number of newly issued shares through public issue as a good firm as compared to the firms which allocates higher number of shares through offer for sales. This is because, the firms which offers higher offer for sales is seen as to have an internal issue which caused their existing shareholder to give-up their shares and the firms have less amount of proceeds to support for their future growth.

The other predictor variables used in this study also found significant in influencing  $R_{IA}$ . The positive and negative sign as well as significant levels of other predictor variables remain the same for both Models. The exceptional is on the significant level of UNDRANK in Model B which switches from 5 percent level to 1 percent. Both models shows that DEMAND and MKTRETURN are significant at 1 percent level indicating that the investors are actively demand for the shares when the firms allocated higher number of proceeds to growth and investment activities. In addition to that, the bullish market condition also attracts higher number of optimistic investors to enter into IPO market. Meanwhile, UNDRANK is significant at 5 percent and 1 percent level indicates that firms which engage with reputable underwriter is a good firms and attract investors to demand for its shares. Last is OFFSIZE which is the only variable that have negative relationship towards  $R_{IA}$  and  $R_{IA(interaction)}$ . The result is consistent to the demand-supply theory forwarded in Abdul-Rahim and Che-Embi (2013), in which larger offer size of offerings can easily be fulfilled thus makes the IPO shares become unattracted.

## V. Conclusion

Using a sample of 447 IPOs listed on Main Market and ACE Market of Bursa Malaysia from the period of January 2000 to December 2018, this study investigated the influence of growth opportunity of a firm and initial aftermarket performance of IPOs. This study also investigated the interaction effect of public issue on the main relationship of growth opportunity of a firm and initial aftermarket performance of IPOs. This study proves a significant positive relationship between growth opportunity of a firm and initial aftermarket performance of IPO, indicating that the investors are relying on the information of "intended used of proceed" specifically the

proceeds allocated to growth and investment activities before they make a decision to invest in IPO firms.

The investigation on the interaction effect of PI is somehow does not supported the hypothesis of this study. In which, there is no interaction effect of public issue on the main relationship between growth opportunity of a firm and initial aftermarket performance of IPOs. Despite the negative insignificant interaction effect, the existence of PI has affected the performance of IPO in the initial aftermarket. The individual effect of PI is really strong. Meaning that, after the inclusion of PI, the investors are more attracted to leave their money in IPO firms as they know that the firms will received 100 percent of proceeds received from the selling of public issue will goes back to the firms. Besides, the growth opportunity of a firm also depending on the proceeds received from the issuance of public issue which explains the findings of this study. Other than growth opportunity of a firm and public issue, demand of IPO, underwriter reputation and market condition are the other predictor variables that significantly positively influence the initial aftermarket performance of IPOs. The only predictor variable that shows a reverse relationship towards initial aftermarket performance is offer size.

In a nutshell, this study is able to provide other predictor variables that influence the performance of IPO in initial aftermarket. The main predictor variable that is growth opportunity of a firm is found to be one of the most important determinant that influence the initial aftermarket performance of IPOs, along with the existence of PI. Meaning that, the investors should take into account on these two information specifically the information on the “use of proceeds” and types of offering in the firms prospectuses before they make any investment decision. Future study, however are still needed to explore for other possible variables due to the low adjusted  $R^2$ . Besides, this study defines growth opportunities as the proceeds allocated to growth and investment activities only. Future studies should also consider other activities as listed in the “use of proceeds” section such as marketing activities as this activity could also increase the growth opportunity of a firm. It is also recommended for future study to extend the observation of the study to long-term aftermarket performance of IPOs. This is because, the type of investors is not limited to short term investors only but also long-term investors. The long-term investors especially could appreciate the information more than short term investors as they are looking for capital appreciation.

Moreover, by looking at the information in the firms prospectuses specifically in the “intended use of proceeds” section and types of offerings, the investors will be on the upper hand, whereby they could expect to gain or secure higher initial return after choosing good IPO firms to invest in. In order to attract investors to participate in the trading of IPOs, as well as to help the firms to sustain longer in the aftermarket, the regulatory body such as Security Commission should impose a minimum requirement of proceeds to be channeled to growth activities as it will give benefit not only to investors but also the IPO issuer as the investors are attracted to invest in IPO firms which have bright future in the aftermarket, thus lead to higher demand form investors and higher initial return. Besides, Bursa Malaysia should maintain and strengthen the current regulation on the 25 percent of shares to be offered through public issue type. This is because, the findings of this study shows that public issue play a role in influencing the direct relationship between growth opportunity of a firm and initial aftermarket performance of IPOs despite the insignificant interaction effect.

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